



## **Bruhat Bangalore Mahanagara Palike**

**Executive Engineer  
Yelhanka Division**

### **DETAILED ESTIMATE**

**NAME OF WORK: Providing Asphaltting to BBMP office road  
bestara bheedhi AD colony main road and Kerekode main road  
in ward no-02 of Yelhanka subdivision**

**PROJECT COST: 99.00 Lakhs**



**Mecadez Core Technologies Private limited**

**Project Management and Consultancy Services**

**Office: #103, 1<sup>st</sup> Main, 3<sup>rd</sup> Cross, Kottigepalya,  
Magadi Main Road, Bangalore 560 091**

**Ph: - +91-9538136111 +91-7829676869**

**E-mail: [mecadez@gmail.com](mailto:mecadez@gmail.com)**

**BRUHAT BANAGLORE MAHANAGARA PALIKE**

**Executive Engineer-Yelhanka Division**

**Detailed Estimate**

**Name of Work:** Providing Asphaltting to BBMP office road bestara bheedhi AD colony main road and Kerekodi main road in ward no-02 of Yelhanka subdivision

| Sl. No. | Particulars | Unit / Rate | Nos | L in m | B in m | D in m | Quantity | Rate in Rs | Total Amount in Rs |
|---------|-------------|-------------|-----|--------|--------|--------|----------|------------|--------------------|
|---------|-------------|-------------|-----|--------|--------|--------|----------|------------|--------------------|

**Estimate Amount : 9900000.00**

**CIVIL WORKS**

**1 Removing Slab of drain and Stacking (Page No 25., I.No.5.32 of KPWD S.R 2015-16).**

Kerekodi road from Kogilu main road to Mazjid road

Sqm

Ch. (0 - 367)

L/s

1

367

0.90

330.30

Duction for Cross roads (30-25)+(87-82)+(291-286) = 15

-1

15

0.90

-13.50

Ch. (0 - 367)

R/s

1

367

0.90

330.30

Duction for Cross roads (319-311) = 8

-1

8

0.90

-7.20

Duction for missing length (151-116)+(319-311) = 43

-1

43

0.90

-38.70

Duction for missing length (311-151) = 160

-1

160

0.90

-144.00

from temple to Old BBMP Office

Ch. (0 - 50)

L/s

1

50

0.60

30.00

Ch. (50 - 88)

L/s

1

38

1.20

45.60

Ch. (0 - 50)

R/s

1

50

0.70

35.00

Ch. (50 - 88)

R/s

1

38

0.90

34.20

BBMP Office road from Railway station road to end road

Ch. (0 - 215)

L/s

1

215

0.70

150.50

Duction for Cross roads (28-23)+(50-47)+(80-77)+(109-106) = 14

-1

14

0.70

-9.80

Ch. (0 - 215)

R/s

1

215

0.90

193.50

Duction for Cross roads (28-23)+(50-47)+(80-77)+(120-116)+(142-136) = 21

-1

21

0.90

-18.90

KD Colony from Lake road to BBMP Roa

Ch. (0 - 174)

B/s

2

174

0.70

243.60

Ch. (174 - 268)

B/s

2

94

0.70

131.60

Mazjid road from circle to end road

Ch. (0 - 1206)

1

1206

0.70

844.20

Duction for Cross roads (105-98)+(816-806)+(855-845) = 27

-1

27

0.70

-18.90

Duction for missing length (483-372) = 111

-1

111

0.70

-77.70

Ch. (34 - 1206)

1

1172

0.70

820.40

Duction for Cross roads (15-0)+(282-275)+(378-372)+(414-407)+(447-441)+(483-477)+(588-581)+(717-713)+(766-759)+(787-784)+(803-796)+(837-831)+(869-862)+(893-900)+(981-973)+(1054-1049)+(1079-1074)+(1109-1105)+(1142-1137)+(1172-1168)+(1186-1181)+1204-1198 = 123

-1

123

0.70

-86.10

2774.40

63.72

176784.77

**2 Reflaxing Slabs of drains and Pointing in C.M(1:3) (Page No 25., I.No.5.33 of KPWD S.R 2015-16).**

Sqm

Kerekodi road from Kogilu main road to Mazjid road

Ch. (0 - 367)

L/s

1

367

0.90

330.30

|   |                                                                                                                                                                                                                                                                                                                                                                             |     |    |      |      |       |         |           |
|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|----|------|------|-------|---------|-----------|
|   | Deduction for Cross roads (30-25) + (87.82) + (291.286) = 15                                                                                                                                                                                                                                                                                                                |     | -1 | 15   | 0.90 |       | -13.50  |           |
|   | Ch. (0 - 367)                                                                                                                                                                                                                                                                                                                                                               | R/s | 1  | 367  | 0.90 |       | 330.30  |           |
|   | Deduction for Cross roads (319-311) = 8                                                                                                                                                                                                                                                                                                                                     |     | -1 | 8    | 0.90 |       | -7.20   |           |
|   | Deduction for missing length (151-116) + (319-311) = 43                                                                                                                                                                                                                                                                                                                     |     | -1 | 43   | 0.90 |       | -38.70  |           |
|   | Deduction for missing length (311-151) = 160                                                                                                                                                                                                                                                                                                                                |     | -1 | 160  | 0.90 |       | -144.00 |           |
|   | from temple to Old BBMP Office                                                                                                                                                                                                                                                                                                                                              |     |    |      |      |       |         |           |
|   | Ch. (0 - 50)                                                                                                                                                                                                                                                                                                                                                                | L/s | 1  | 50   | 0.60 |       | 30.00   |           |
|   | Ch. (50 - 88)                                                                                                                                                                                                                                                                                                                                                               | L/s | 1  | 38   | 1.20 |       | 45.60   |           |
|   | Ch. (0 - 50)                                                                                                                                                                                                                                                                                                                                                                | R/s | 1  | 50   | 0.70 |       | 35.00   |           |
|   | Ch. (50 - 88)                                                                                                                                                                                                                                                                                                                                                               | R/s | 1  | 38   | 0.90 |       | 34.20   |           |
|   | BBMP Office road from Railway station road to end road                                                                                                                                                                                                                                                                                                                      |     |    |      |      |       |         |           |
|   | Ch. (0 - 215)                                                                                                                                                                                                                                                                                                                                                               | L/s | 1  | 215  | 0.70 |       | 150.50  |           |
|   | Deduction for Cross roads (28-23) + (50-47) + (80-77) + (109-106) = 14                                                                                                                                                                                                                                                                                                      |     | -1 | 14   | 0.70 |       | -9.80   |           |
|   | Ch. (0 - 215)                                                                                                                                                                                                                                                                                                                                                               | R/s | 1  | 215  | 0.90 |       | 193.50  |           |
|   | Deduction for Cross roads (28-23) + (50-47) + (80-77) + (120-116) + (142-136) = 21                                                                                                                                                                                                                                                                                          |     | -1 | 21   | 0.90 |       | -18.90  |           |
|   | KD Colony from Lake road to BBMP Roa                                                                                                                                                                                                                                                                                                                                        |     |    |      |      |       |         |           |
|   | Ch. (0 - 174)                                                                                                                                                                                                                                                                                                                                                               | B/s | 2  | 174  | 0.70 |       | 243.60  |           |
|   | Ch. (174 - 268)                                                                                                                                                                                                                                                                                                                                                             | B/s | 2  | 94   | 0.70 |       | 131.60  |           |
|   | Mazjid road from circle to end road                                                                                                                                                                                                                                                                                                                                         |     |    |      |      |       |         |           |
|   | Ch. (0 - 1206)                                                                                                                                                                                                                                                                                                                                                              |     | 1  | 1206 | 0.70 |       | 844.20  |           |
|   | Deduction for Cross roads (105-98) + (816-806) + (855-845) = 27                                                                                                                                                                                                                                                                                                             |     | -1 | 27   | 0.70 |       | -18.90  |           |
|   | Deduction for missing length (483-372) = 111                                                                                                                                                                                                                                                                                                                                |     | -1 | 111  | 0.70 |       | -77.70  |           |
|   | Ch. (34 - 1206)                                                                                                                                                                                                                                                                                                                                                             |     | 1  | 1172 | 0.70 |       | 820.40  |           |
|   | Deduction for Cross roads (15-0) + (282-275) + (378-372) + (414-407) + (447-441) + (483-477) + (588-581) + (717-713) + (766-759) + (787-784) + (803-796) + (837-831) + (869-862) + (893-900) + (981-973) + (1054-1049) + (1079-1074) + (1109-1105) + (1142-1137) + (1172-1168) + (1186-1181) + 1204 1198) = 123                                                             |     | -1 | 123  | 0.70 |       | -86.10  |           |
|   |                                                                                                                                                                                                                                                                                                                                                                             |     |    |      |      |       |         |           |
|   | Deduction for damaged 5%                                                                                                                                                                                                                                                                                                                                                    |     |    |      |      |       | 2774.40 |           |
|   |                                                                                                                                                                                                                                                                                                                                                                             |     |    |      |      |       | -138.72 |           |
|   |                                                                                                                                                                                                                                                                                                                                                                             |     |    |      |      |       | 2635.68 | 78.84     |
| 3 | Providing precast slab of 100 mm thick including cost of all materials, labour, curing, transportation, loading, unloading, etc., complete as per the direction of engineer in charge-                                                                                                                                                                                      |     |    |      |      |       |         | 207797.01 |
|   | Data rate                                                                                                                                                                                                                                                                                                                                                                   | Sqm |    |      |      |       |         |           |
|   | Deduction for damaged 5%                                                                                                                                                                                                                                                                                                                                                    |     |    |      |      |       | 138.72  |           |
|   |                                                                                                                                                                                                                                                                                                                                                                             |     |    |      |      |       | 138.72  | 1834.00   |
| 8 | KSRRB 300-1. Earthwork excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 1.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications. MORTH / Chapter 3 (Page No 141., I.No.19.1 of KPWD S.R 2015-16). | Cum |    |      |      |       |         | 254412.48 |
|   | Desilting                                                                                                                                                                                                                                                                                                                                                                   |     |    |      |      |       |         |           |
|   | Kerekodi road from Kogilu main road to Mazjid road                                                                                                                                                                                                                                                                                                                          |     |    |      |      |       |         |           |
|   | Ch. (0 - 367)                                                                                                                                                                                                                                                                                                                                                               | L/s | 1  | 367  | 0.60 | 0.600 | 132.12  |           |
|   | Ch. (0 - 367)                                                                                                                                                                                                                                                                                                                                                               | R/s | 1  | 367  | 0.60 | 0.600 | 132.12  |           |
|   | Deduction for missing length (151-116) + (319-311) = 43                                                                                                                                                                                                                                                                                                                     |     | -1 | 43   | 0.60 | 0.600 | -15.48  |           |

|  |                                                                                                                                                                                                                                                                      |     |    |      |      |       |         |        |           |
|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|----|------|------|-------|---------|--------|-----------|
|  | Deduction for missing length (311-151) = 160                                                                                                                                                                                                                         |     | -1 | 160  | 0.60 | 0.600 | -57.60  |        |           |
|  | from temple to Old BBMP Office                                                                                                                                                                                                                                       |     |    |      |      |       |         |        |           |
|  | Ch (0 - 50)                                                                                                                                                                                                                                                          | L/s | 1  | 50   | 0.40 | 0.400 | 8.00    |        |           |
|  | Ch (50 - 88)                                                                                                                                                                                                                                                         | L/s | 1  | 38   | 0.60 | 0.600 | 13.68   |        |           |
|  | Ch (0 - 50)                                                                                                                                                                                                                                                          | R/s | 1  | 50   | 0.40 | 0.400 | 8.00    |        |           |
|  | Ch (50 - 88)                                                                                                                                                                                                                                                         | R/s | 1  | 38   | 0.60 | 0.600 | 13.68   |        |           |
|  | BBMP Office road from Railway station road to end road                                                                                                                                                                                                               |     |    |      |      |       |         |        |           |
|  | Ch (0 - 215)                                                                                                                                                                                                                                                         | L/s | 1  | 215  | 0.40 | 0.600 | 51.60   |        |           |
|  | Ch (0 - 215)                                                                                                                                                                                                                                                         | R/s | 1  | 215  | 0.60 | 0.600 | 77.40   |        |           |
|  | KD Colony from Lake road to BBMP Roa                                                                                                                                                                                                                                 |     |    |      |      |       |         |        |           |
|  | Ch (0 - 174)                                                                                                                                                                                                                                                         | B/s | 2  | 174  | 0.50 | 0.600 | 104.40  |        |           |
|  | Ch (174 - 268)                                                                                                                                                                                                                                                       | B/s | 2  | 94   | 0.50 | 0.500 | 47.00   |        |           |
|  | Mazjid road from circle to end road                                                                                                                                                                                                                                  |     |    |      |      |       |         |        |           |
|  | Ch (0 - 1206)                                                                                                                                                                                                                                                        |     | 1  | 1206 | 0.50 | 0.600 | 361.80  |        |           |
|  | Deduction for missing length (483-372) = 111                                                                                                                                                                                                                         |     | -1 | 111  | 0.50 | 0.600 | -33.30  |        |           |
|  | Ch (34 - 1206)                                                                                                                                                                                                                                                       |     | 1  | 1172 | 0.50 | 0.600 | 351.60  |        |           |
|  | Deduction for cross road (15-0)-(282-275)+(378-372)+(414-407)+(447-441)+(483-477)+(588-581)+(717-713)+(766-759)+(787-784)+(803-796)+(837-831)+(869-862)+(893-900)+(981-973)+(1054-1049)+(1079-1074)+(1109-1105)+(1142-1137)+(1172-1168)+(1186-1181)+1204-1198) = 123 |     | -1 | 123  | 0.50 | 0.600 | -36.90  |        |           |
|  |                                                                                                                                                                                                                                                                      |     |    |      |      |       | 1158.12 | 168.76 | 195444.33 |

#### ROAD WORKS

|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |     |   |     |      |       |        |         |           |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|---|-----|------|-------|--------|---------|-----------|
| 16 | KSRRB M300-14. Excavation for roadwork in all type of soil with hydraulic excavator of 0.9 cum bucket capacity including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transporting to the embankment location to a lead of 1.00 km and complete as per specifications. MORTH Specification No.301                                                                                                                    |     |   |     |      |       |        |         |           |
|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Cum |   |     |      |       |        |         |           |
|    | Road cutting                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |     |   |     |      |       |        |         |           |
|    | Mazjid road from circle to end road                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |     |   |     |      |       |        |         |           |
|    | Ch (264 - 581)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |     | 1 | 317 | 1.20 | 0.300 | 114.12 |         |           |
|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |     |   |     |      |       | 114.12 | 134.20  | 15314.90  |
| 17 | KSRRB 300-58. Compaction of original ground with maximum of 6 passes of 8 to 10 tonnes power roller including filling in depression occurring during rolling including cost of all labour, HOM of machinery complete as per specifications. MORTH / Chapter 3 (Page No 148., I.No.19.64 of KPWD S.R 2015-16).                                                                                                                                                                                                     |     |   |     |      |       |        |         |           |
|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Sqm |   |     |      |       |        |         |           |
|    | Road cutting                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |     |   |     |      |       |        |         |           |
|    | Mazjid road from circle to end road                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |     |   |     |      |       |        |         |           |
|    | Ch (264 - 581)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |     | 1 | 317 | 1.20 |       | 380.40 |         |           |
|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |     |   |     |      |       | 380.40 | 4.86    | 1848.74   |
| 19 | KSRRB M400-17. Providing, laying, spreading and compacting graded stones aggregate to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed method of tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications. MORTH Specification No. 406 (Page No 157., I.No.20.18 of KPWD S.R 2015-16). |     |   |     |      |       |        |         |           |
|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Cum |   |     |      |       |        |         |           |
|    | Road cutting                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |     |   |     |      |       |        |         |           |
|    | Mazjid road from circle to end road                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |     |   |     |      |       |        |         |           |
|    | Ch (264 - 581)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |     | 1 | 317 | 1.20 | 0.200 | 76.08  |         |           |
|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |     |   |     |      |       | 76.08  | 1713.96 | 130398.08 |

|    |                                                                                                                                                                                                                                                                                                                                                                                               |     |     |       |  |          |       |          |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----|-------|--|----------|-------|----------|
| 20 | KSRRB M500-6. Providing and applying primer coat with S.S. bitumen emulsion on prepared surface of granular base such as WBM,WMM ,including clearing of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per Specifications. MORTH Specification No. 502 (Page No 160., I.No.21.6 of KPWD S.R 2015-16).                                       |     |     |       |  |          |       |          |
|    |                                                                                                                                                                                                                                                                                                                                                                                               | Sqm |     |       |  |          |       |          |
|    | Road cutting                                                                                                                                                                                                                                                                                                                                                                                  |     |     |       |  |          |       |          |
|    | Mazjid road from circle to end road                                                                                                                                                                                                                                                                                                                                                           |     |     |       |  |          |       |          |
|    | Ch. (264 - 581)                                                                                                                                                                                                                                                                                                                                                                               | 1   | 317 | 1.20  |  | 380.40   |       |          |
|    |                                                                                                                                                                                                                                                                                                                                                                                               |     |     |       |  | 380.40   | 32.40 | 12324.96 |
| 21 | KSRRB 500-2. Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatment including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH / Chapter 5 (Page No 160., I.No.21.2 of KPWD S.R 2015-16).                                                |     |     |       |  |          |       |          |
|    |                                                                                                                                                                                                                                                                                                                                                                                               | Sqm |     |       |  |          |       |          |
|    | Bestara beedi road                                                                                                                                                                                                                                                                                                                                                                            |     |     |       |  |          |       |          |
|    | Ch. (0 - 151)                                                                                                                                                                                                                                                                                                                                                                                 | 1   | 151 | 5.00  |  | 755.00   |       |          |
|    | Ch. (151 - 216)                                                                                                                                                                                                                                                                                                                                                                               | 1   | 65  | 6.50  |  | 422.50   |       |          |
|    | Kerekodi road from Kogilu main road to Mazjid road                                                                                                                                                                                                                                                                                                                                            |     |     |       |  |          |       |          |
|    | Ch. (0 - 87)                                                                                                                                                                                                                                                                                                                                                                                  | 1   | 87  | 5.50  |  | 478.50   |       |          |
|    | Ch. (87 - 151)                                                                                                                                                                                                                                                                                                                                                                                | 1   | 64  | 8.75  |  | 560.00   |       |          |
|    | Ch. (151 - 286)                                                                                                                                                                                                                                                                                                                                                                               | 1   | 135 | 9.27  |  | 1251.00  |       |          |
|    | Ch. (286 - 367)                                                                                                                                                                                                                                                                                                                                                                               | 1   | 81  | 8.00  |  | 648.00   |       |          |
|    | from temple to Old BBMP Office                                                                                                                                                                                                                                                                                                                                                                |     |     |       |  |          |       |          |
|    | Ch. (0 - 50)                                                                                                                                                                                                                                                                                                                                                                                  | 1   | 50  | 4.00  |  | 200.00   |       |          |
|    | Ch. (50 - 88)                                                                                                                                                                                                                                                                                                                                                                                 | 1   | 38  | 10.50 |  | 399.00   |       |          |
|    | BBMP Office road from Railway station road to end road                                                                                                                                                                                                                                                                                                                                        |     |     |       |  |          |       |          |
|    | Ch. (0 - 50)                                                                                                                                                                                                                                                                                                                                                                                  | 1   | 50  | 10.20 |  | 510.00   |       |          |
|    | Ch. (50 - 142)                                                                                                                                                                                                                                                                                                                                                                                | 1   | 92  | 5.00  |  | 460.00   |       |          |
|    | Ch. (142 - 215)                                                                                                                                                                                                                                                                                                                                                                               | 1   | 73  | 8.00  |  | 584.00   |       |          |
|    | KD Colony from Lake road to BBMP Roa                                                                                                                                                                                                                                                                                                                                                          |     |     |       |  |          |       |          |
|    | Ch. (0 - 174)                                                                                                                                                                                                                                                                                                                                                                                 | 1   | 174 | 4.00  |  | 696.00   |       |          |
|    | Ch. (174 - 268)                                                                                                                                                                                                                                                                                                                                                                               | 1   | 94  | 5.50  |  | 517.00   |       |          |
|    | Mazjid road from circle to end road                                                                                                                                                                                                                                                                                                                                                           |     |     |       |  |          |       |          |
|    | Ch. (0 - 173)                                                                                                                                                                                                                                                                                                                                                                                 | 1   | 173 | 7.00  |  | 1211.00  |       |          |
|    | Ch. (173 - 243)                                                                                                                                                                                                                                                                                                                                                                               | 1   | 70  | 6.50  |  | 455.00   |       |          |
|    | Ch. (243 - 282)                                                                                                                                                                                                                                                                                                                                                                               | 1   | 39  | 6.50  |  | 253.50   |       |          |
|    | Ch. (282 - 414)                                                                                                                                                                                                                                                                                                                                                                               | 1   | 132 | 8.80  |  | 1161.60  |       |          |
|    | Ch. (414 - 491)                                                                                                                                                                                                                                                                                                                                                                               | 1   | 77  | 11.50 |  | 885.50   |       |          |
|    | Ch. (491 - 713)                                                                                                                                                                                                                                                                                                                                                                               | 1   | 222 | 11.20 |  | 2486.40  |       |          |
|    | Ch. (713 - 803)                                                                                                                                                                                                                                                                                                                                                                               | 1   | 90  | 8.00  |  | 720.00   |       |          |
|    | Ch. (803 - 893)                                                                                                                                                                                                                                                                                                                                                                               | 1   | 90  | 9.40  |  | 846.00   |       |          |
|    | Ch. (893 - 1142)                                                                                                                                                                                                                                                                                                                                                                              | 1   | 249 | 7.80  |  | 1942.20  |       |          |
|    | Ch. (1142 - 1206)                                                                                                                                                                                                                                                                                                                                                                             | 1   | 64  | 8.40  |  | 537.60   |       |          |
|    |                                                                                                                                                                                                                                                                                                                                                                                               |     |     |       |  | 17979.80 | 3.24  | 58254.55 |
| 22 | KSRRB 500-7. Providing and applying tack coat using 80/100 grade Bitumen (VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm , heating bitumen in boiler fitted with spray set (excluding cleaning of road surface ) including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH/Chapter 5 (Page No 160., I.No.21.7 of KPWD S.R 2015-16). |     |     |       |  |          |       |          |
|    |                                                                                                                                                                                                                                                                                                                                                                                               | Sqm |     |       |  |          |       |          |
|    | Bestara beedi road                                                                                                                                                                                                                                                                                                                                                                            |     |     |       |  |          |       |          |
|    | Ch. (0 - 151)                                                                                                                                                                                                                                                                                                                                                                                 | 1   | 151 | 5.00  |  | 755.00   |       |          |
|    | Ch. (151 - 216)                                                                                                                                                                                                                                                                                                                                                                               | 1   | 65  | 6.50  |  | 422.50   |       |          |
|    | Kerekodi road from Kogilu main road to Mazjid road                                                                                                                                                                                                                                                                                                                                            |     |     |       |  |          |       |          |
|    | Ch. (0 - 87)                                                                                                                                                                                                                                                                                                                                                                                  | 1   | 87  | 5.50  |  | 478.50   |       |          |
|    | Ch. (87 - 151)                                                                                                                                                                                                                                                                                                                                                                                | 1   | 64  | 8.75  |  | 560.00   |       |          |
|    | Ch. (151 - 286)                                                                                                                                                                                                                                                                                                                                                                               | 1   | 135 | 9.27  |  | 1251.00  |       |          |
|    | Ch. (286 - 367)                                                                                                                                                                                                                                                                                                                                                                               | 1   | 81  | 8.00  |  | 648.00   |       |          |
|    | from temple to Old BBMP Office                                                                                                                                                                                                                                                                                                                                                                |     |     |       |  |          |       |          |
|    | Ch. (0 - 50)                                                                                                                                                                                                                                                                                                                                                                                  | 1   | 50  | 4.00  |  | 200.00   |       |          |
|    | Ch. (50 - 88)                                                                                                                                                                                                                                                                                                                                                                                 | 1   | 38  | 10.50 |  | 399.00   |       |          |

|                                                        |   |     |       |  |          |       |           |
|--------------------------------------------------------|---|-----|-------|--|----------|-------|-----------|
| BBMP Office road from Railway station road to end road |   |     |       |  |          |       |           |
| Ch. (0 - 50)                                           | 1 | 50  | 10.20 |  | 510.00   |       |           |
| Ch. (50 - 142)                                         | 1 | 92  | 5.00  |  | 460.00   |       |           |
| Ch. (142 - 215)                                        | 1 | 73  | 8.00  |  | 584.00   |       |           |
| KD Colony from Lake road to BBMP Roa                   |   |     |       |  |          |       |           |
| Ch. (0 - 174)                                          | 1 | 174 | 4.00  |  | 696.00   |       |           |
| Ch. (174 - 268)                                        | 1 | 94  | 5.50  |  | 517.00   |       |           |
| Mazjid road from circle to end road                    |   |     |       |  |          |       |           |
| Ch. (0 - 173)                                          | 1 | 173 | 7.00  |  | 1211.00  |       |           |
| Ch. (173 - 243)                                        | 1 | 70  | 6.50  |  | 455.00   |       |           |
| Ch. (243 - 282)                                        | 1 | 39  | 6.50  |  | 253.50   |       |           |
| Ch. (282 - 414)                                        | 1 | 132 | 8.80  |  | 1161.60  |       |           |
| Ch. (414 - 491)                                        | 1 | 77  | 11.50 |  | 885.50   |       |           |
| Ch. (491 - 713)                                        | 1 | 222 | 11.20 |  | 2486.40  |       |           |
| Ch. (713 - 803)                                        | 1 | 90  | 8.00  |  | 720.00   |       |           |
| Ch. (803 - 893)                                        | 1 | 90  | 9.40  |  | 846.00   |       |           |
| Ch. (893 - 1142)                                       | 1 | 249 | 7.80  |  | 1942.20  |       |           |
| Ch. (1142 - 1206)                                      | 1 | 64  | 8.40  |  | 537.60   |       |           |
|                                                        |   |     |       |  | 17979.80 | 15.12 | 271854.58 |

- 23 KSRRB M500-15. Providing, laying **dense graded bituminous macadam** using 40/60 THP capacity H.M.P with Mechanical paver Gr-II(50mm to 75mm), crushed aggregates of specified grading premixed with 4.5% VG 30 grade bituminous binder and , transporting the hot mix to work site , laying to the required level and grade, rolling with wheeled , vibratory and tandem rollers to achieve the desired density including all leads and lift cost of all materials, labour, HOM of machineries complete as per specifications MORTH Specification No.507 (Page No 161., I.No.21.17.6 of KPWD S.R 2015-16).

|                                     |     |         |      |       |        |         |            |
|-------------------------------------|-----|---------|------|-------|--------|---------|------------|
|                                     | Cum |         |      |       |        |         |            |
| Road cutting                        |     |         |      |       |        |         |            |
| Mazjid road from circle to end road |     |         |      |       |        |         |            |
| Ch. (264 - 581)                     | 1   | 317     | 1.20 | 0.050 | 19.02  |         |            |
| Profile correction                  |     |         |      |       |        |         |            |
|                                     | 1   | 2337.37 |      | 0.050 | 116.87 |         |            |
| taking 15% of the area              |     |         |      |       |        |         |            |
|                                     |     |         |      |       | 135.89 | 7927.20 | 1077216.90 |

- 24 KSRRB M500- 15. Providing, laying **bituminousConcrete** using 40/60 THP capacity H.M.P with Mechanical paver Gr-II(30mm to 45mm), crushed aggregates of specified grading premixed with 6% VG 30 grade bituminous binder and , transporting the hot mix to work site , laying to the required level and grade, rolling with wheeled , vibratory and tandem rollers to achieve the desired density including all leads and lift cost of all materials, labour, HOM of machineries complete as per specifications MORTH Specification No.509 (Page No 164., I.No.21.22.6 of KPWD S.R 2015-16)

|                                                        |     |     |       |       |       |  |  |
|--------------------------------------------------------|-----|-----|-------|-------|-------|--|--|
|                                                        | Cum |     |       |       |       |  |  |
| Bestara beedi road                                     |     |     |       |       |       |  |  |
| Ch. (0 - 151)                                          | 1   | 151 | 5.00  | 0.030 | 22.65 |  |  |
| Ch. (151 - 216)                                        | 1   | 65  | 6.50  | 0.030 | 12.68 |  |  |
| Kerekodi road from Kogilu main road to Mazjid road     |     |     |       |       |       |  |  |
| Ch. (0 - 87)                                           | 1   | 87  | 5.50  | 0.040 | 19.14 |  |  |
| Ch. (87 - 151)                                         | 1   | 64  | 8.75  | 0.040 | 22.40 |  |  |
| Ch. (151 - 286)                                        | 1   | 135 | 9.27  | 0.040 | 50.04 |  |  |
| Ch. (286 - 367)                                        | 1   | 81  | 8.00  | 0.040 | 25.92 |  |  |
| from temple to Old BBMP Office                         |     |     |       |       |       |  |  |
| Ch. (0 - 50)                                           | 1   | 50  | 4.00  | 0.040 | 8.00  |  |  |
| Ch. (50 - 88)                                          | 1   | 38  | 10.50 | 0.040 | 15.96 |  |  |
| BBMP Office road from Railway station road to end road |     |     |       |       |       |  |  |
| Ch. (0 - 50)                                           | 1   | 50  | 10.20 | 0.040 | 20.40 |  |  |
| Ch. (50 - 142)                                         | 1   | 92  | 5.00  | 0.040 | 18.40 |  |  |
| Ch. (142 - 215)                                        | 1   | 73  | 8.00  | 0.040 | 23.36 |  |  |
| KD Colony from Lake road to BBMP Roa                   |     |     |       |       |       |  |  |
| Ch. (0 - 174)                                          | 1   | 174 | 4.00  | 0.040 | 27.84 |  |  |
| Ch. (174 - 268)                                        | 1   | 94  | 5.50  | 0.040 | 20.68 |  |  |
| Mazjid road from circle to end road                    |     |     |       |       |       |  |  |

|                   |   |     |       |       |               |                |                   |
|-------------------|---|-----|-------|-------|---------------|----------------|-------------------|
| Ch. (0 - 173)     | 1 | 173 | 7.00  | 0.040 | 48.44         |                |                   |
| Ch. (173 - 243)   | 1 | 70  | 6.50  | 0.040 | 18.20         |                |                   |
| Ch. (243 - 282)   | 1 | 39  | 6.50  | 0.040 | 10.14         |                |                   |
| Ch. (282 - 414)   | 1 | 132 | 8.80  | 0.040 | 46.46         |                |                   |
| Ch. (414 - 491)   | 1 | 77  | 11.50 | 0.040 | 35.42         |                |                   |
| Ch. (491 - 713)   | 1 | 222 | 11.20 | 0.040 | 99.46         |                |                   |
| Ch. (713 - 803)   | 1 | 90  | 8.00  | 0.040 | 28.80         |                |                   |
| Ch. (803 - 893)   | 1 | 90  | 9.40  | 0.040 | 33.84         |                |                   |
| Ch. (893 - 1142)  | 1 | 249 | 7.80  | 0.040 | 77.69         |                |                   |
| Ch. (1142 - 1206) | 1 | 64  | 8.40  | 0.040 | 21.50         |                |                   |
|                   |   |     |       |       | <b>707.42</b> | <b>9822.60</b> | <b>6948674.22</b> |

#### ROAD FURNITURES

|    |                                                                                                                                                                                                                                                                                                                                                                                                                                  |            |     |      |       |  |  |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-----|------|-------|--|--|
| 26 | KSRRB M800-13. Providing and laying of <b>hot applied thermoplastic compound</b> 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC-35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803 (Page No 181., I.No.24.15 of KPWD S.R 2015-16). |            |     |      |       |  |  |
|    | <b>Road Marking</b>                                                                                                                                                                                                                                                                                                                                                                                                              | <b>Sqm</b> |     |      |       |  |  |
|    | Bestara beedi road                                                                                                                                                                                                                                                                                                                                                                                                               |            |     |      |       |  |  |
|    | Ch. (0 - 151)                                                                                                                                                                                                                                                                                                                                                                                                                    | 2.5        | 151 | 0.10 | 37.75 |  |  |
|    | Ch. (151 - 216)                                                                                                                                                                                                                                                                                                                                                                                                                  | 2.5        | 65  | 0.10 | 16.25 |  |  |
|    | Kerekodi road from Kogilu main road to Masjid road                                                                                                                                                                                                                                                                                                                                                                               |            |     |      |       |  |  |
|    | Ch. (0 - 87)                                                                                                                                                                                                                                                                                                                                                                                                                     | 2.5        | 87  | 0.10 | 21.75 |  |  |
|    | Ch. (87 - 151)                                                                                                                                                                                                                                                                                                                                                                                                                   | 2.5        | 64  | 0.10 | 16.00 |  |  |
|    | Ch. (151 - 286)                                                                                                                                                                                                                                                                                                                                                                                                                  | 2.5        | 135 | 0.10 | 33.75 |  |  |
|    | Ch. (286 - 367)                                                                                                                                                                                                                                                                                                                                                                                                                  | 2.5        | 81  | 0.10 | 20.25 |  |  |
|    | from temple to Old BBMP Office                                                                                                                                                                                                                                                                                                                                                                                                   |            |     |      |       |  |  |
|    | Ch. (0 - 50)                                                                                                                                                                                                                                                                                                                                                                                                                     | 2          | 50  | 0.10 | 10.00 |  |  |
|    | Ch. (50 - 88)                                                                                                                                                                                                                                                                                                                                                                                                                    | 2          | 38  | 0.10 | 7.60  |  |  |
|    | BBMP Office road from Railway station road to end road                                                                                                                                                                                                                                                                                                                                                                           |            |     |      |       |  |  |
|    | Ch. (0 - 50)                                                                                                                                                                                                                                                                                                                                                                                                                     | 2          | 50  | 0.10 | 10.00 |  |  |
|    | Ch. (50 - 142)                                                                                                                                                                                                                                                                                                                                                                                                                   | 2          | 92  | 0.10 | 18.40 |  |  |
|    | Ch. (142 - 215)                                                                                                                                                                                                                                                                                                                                                                                                                  | 2          | 73  | 0.10 | 14.60 |  |  |
|    | KD Colony from Lake road to BBMP Roa                                                                                                                                                                                                                                                                                                                                                                                             |            |     |      |       |  |  |
|    | Ch. (0 - 174)                                                                                                                                                                                                                                                                                                                                                                                                                    | 2          | 174 | 0.10 | 34.80 |  |  |

|                                     |                                                                   |           |          |                |  |               |               |                   |
|-------------------------------------|-------------------------------------------------------------------|-----------|----------|----------------|--|---------------|---------------|-------------------|
| Ch. (174 - 268)                     |                                                                   | 2         | 94       | 0.10           |  | 18.80         |               |                   |
| Marjld road from circle to end road |                                                                   |           |          |                |  |               |               |                   |
| Ch. (0 - 173)                       |                                                                   |           |          |                |  |               |               |                   |
| Ch. (173 - 243)                     |                                                                   | 2         | 173      | 0.10           |  | 34.60         |               |                   |
| Ch. (243 - 282)                     |                                                                   | 2         | 70       | 0.10           |  | 14.00         |               |                   |
| Ch. (282 - 414)                     |                                                                   | 2         | 39       | 0.10           |  | 7.80          |               |                   |
| Ch. (414 - 491)                     |                                                                   | 2         | 132      | 0.10           |  | 26.40         |               |                   |
| Ch. (491 - 713)                     |                                                                   | 2         | 77       | 0.10           |  | 15.40         |               |                   |
| Ch. (713 - 803)                     |                                                                   | 2         | 222      | 0.10           |  | 44.40         |               |                   |
| Ch. (803 - 893)                     |                                                                   | 2         | 90       | 0.10           |  | 18.00         |               |                   |
| Ch. (893 - 1142)                    |                                                                   | 2         | 90       | 0.10           |  | 18.00         |               |                   |
| Ch. (1142 - 1206)                   |                                                                   | 2         | 249      | 0.10           |  | 49.80         |               |                   |
|                                     |                                                                   | 2         | 64       | 0.10           |  | 12.80         |               |                   |
| <b>Sub Total</b>                    |                                                                   |           |          |                |  | <b>501.15</b> | <b>473.04</b> | <b>237064.00</b>  |
| 27                                  | Cost towards Design Report and Detailed Estimate, PMC/Third party |           |          |                |  |               |               | <b>9587389.52</b> |
| 28                                  | <b>Cost of Plastic@ 8% of bitumen qty for BC</b>                  |           |          |                |  |               |               | <b>95873.90</b>   |
| #REF!                               | Miscellaneous and other charges                                   | <b>Kg</b> | <b>1</b> | <b>7979.66</b> |  |               | <b>27.00</b>  | <b>215450.92</b>  |
| <b>Grand Total</b>                  |                                                                   |           |          |                |  |               |               | <b>1285.66</b>    |
|                                     |                                                                   |           |          |                |  |               |               | <b>9900000.00</b> |

**Certificate:-**

1. That the workspot inspected by me and found work is necessary.
2. That the area comes with in the Bruhat Bangalore Mahanagara Palike Limits.
3. That the rates are adopted based on the PWD SR of 2015-16
4. That the provisions made in the estimate are necessary and quite essential.

Consultant:

For M/s MECADEZ CORE TECHNOLOGIES PVT LTD

*Ramajeev*  
Asst. Engineer  
Ward No-03  
BBMP

*(Signature)*  
AEE  
Yelhanka Sub Division  
BBMP

*(Signature)*  
Executive Engineer  
Yelhanka Division  
BBMP